

CLAIMS

What is claimed is:

1. An electric motor selectively connectable to receive one of a plurality of supply voltages, the plurality of supply voltages comprising a low supply voltage and a high supply voltage, the electric motor comprising:
 - a stator comprising a first winding and a second winding;
 - a shaft rotatable about a motor axis;
 - a rotor supported by the shaft for rotation with the shaft relative to the stator;
 - a voltage selection device comprising a first setting and a second setting, the voltage selection device configured to connect the first winding in parallel with the second winding when set to the first setting, and connect the first winding in series with the second winding when set to the second setting;
 - a first motor protector configured to limit current through the first winding and the second winding when an overload condition exists; and
 - a second motor protector configured to limit current through the first winding and the second winding when the voltage selection device is set to the first setting and the electric motor is connected to receive a high supply voltage.
2. An electric motor according to claim 1 wherein the first motor protector comprises an automatic reset motor protector.
3. An electric motor according to claim 1 wherein the second motor protector comprises a manual reset motor protector.
4. An electric motor according to claim 1 wherein the manual reset motor protector comprises an actuator for manual reset of the second motor protector, and wherein the actuator is visible during normal operation of the electric motor.
5. An electric motor according to claim 3 and further comprising an indicator adjacent the actuator, and wherein the indicator comprises instructions to change the voltage selection device to the second setting before resetting the second motor protector.

6. An electric motor according to claim 1 wherein the second motor protector is a one-time use motor protector.
7. An electric motor according to claim 1 wherein the overload condition comprises at least one of a thermal overload condition, a current overload condition, and a combination of a thermal overload condition and a current overload condition.
8. An electric motor according to claim 1 wherein the first motor protector is at least one of a current sensitive motor protector, a temperature sensitive motor protector, and a combination of a current sensitive motor protector and a temperature sensitive motor protector.
9. An electric motor according to claim 1 wherein the second motor protector is at least one of a current sensitive motor protector, a temperature sensitive motor protector, and a combination of a current sensitive motor protector and a temperature sensitive motor protector.
10. An electric motor according to claim 1 wherein the first winding is connected in parallel with the second winding via the first motor protector when the voltage change device is set to the first setting.
11. An electric motor according to claim 10 wherein the second motor protector is connected in series with the first motor protector when the voltage change device is set to the first setting.
12. An electric motor according to claim 1 wherein the first and second windings are connected in series with the first and second motor protectors when the voltage change device is set to the second setting.
13. An electric motor according to claim 1 wherein the first winding and the second winding are electrically connectable to a power supply via a hot electrical conduit and a neutral electrical conduit, and wherein the first and second motor protectors are electrically connected between the hot electrical conduit and the first and second windings.

14. An electric motor selectively connectable to receive one of a plurality of supply voltages, the plurality of supply voltages comprising a first supply voltage and a second supply voltage, the second supply voltage being greater than the first supply voltage, the electric motor comprising:

a stator including a first winding and a second winding;

a shaft and rotor rotatable about a motor axis;

a switch comprising a first setting and a second setting, the switch being configured to connect the first winding in parallel with the second winding when the switch is set to the first setting and connect the first winding in series with the second winding when the switch is set to the second setting;

an overload protection device electrically connected to the first winding and the second winding during normal operation of the electric motor; and

a miswiring protection device electrically connected to the first winding and the second winding during normal operation of the electric motor.

15. An electric motor according to claim 14 wherein the overload protection device is configured to limit current through the first winding and the second winding when an overload condition exists.

16. An electric motor according to claim 14 wherein the miswiring protection device is configured to limit current through the first winding and the second winding when the switch is set to the first setting but the electric motor is connected to receive a second supply voltage.

17. An electric motor selectively connectable to receive one of a plurality of supply voltages, the plurality of supply voltages comprising a low supply voltage and a high supply voltage, the electric motor comprising:

- a stator comprising a first winding and a second winding;
- a shaft rotatable about a motor axis;
- a rotor supported by the shaft for rotation with the shaft relative to the stator;
- a voltage selection device comprising a first setting and a second setting, the voltage selection device configured to connect the first winding in parallel with the second winding when set to the first setting, and connect the first winding in series with the second winding when set to the second setting;
- an overload protection device electrically connected to the first winding and the second winding during normal operation of the electric motor, the overload protection device being configured to limit current through the first winding and the second winding when an overload condition exists; and
- a miswiring protection device electrically connected to the first winding and the second winding during normal operation of the electric motor, the miswiring protection device being configured to limit current through the first winding and the second winding when the voltage selection device is set to the first setting and the electric motor is connected to receive a high supply voltage.

18. An electric motor according to claim 17 and further comprising a pressure switch, wherein the first and second windings are electrically connected to a power supply via the pressure switch.

19. An electric motor according to claim 17 wherein the miswiring protection device comprises a manual reset miswiring protection device, wherein the manual reset motor protector comprises an actuator for manual reset of the miswiring protection device, and wherein the actuator is visible during normal operation of the electric motor.

20. An electric motor according to claim 19 and further comprising an indicator adjacent the actuator, and wherein the indicator comprises instructions to change the voltage selection device to the second setting before resetting the miswiring protection device.